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FILE CONTENT:1840 - 9 Aug 2009 VOL 151 ISS 7

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L1 STRUCTURE UPLOADED

=> d 11

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L1 STR

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=> s 11

SAMPLE SEARCH INITIATED 14:24:24 FILE 'CASREACT'

SCREENING COMPLETE - 268 REACTIONS TO VERIFY FROM

23 DOCUMENTS

0 DOCS

100.0% DONE 268 VERIFIED 0 HIT RXNS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED VERIFICATIONS: 4378 TO 6342 PROJECTED ANSWERS: 0 TO

L2 0 SEA SSS SAM L1 (0 REACTIONS)

=> s 11 full

FULL SEARCH INITIATED 14:24:29 FILE 'CASREACT'

SCREENING COMPLETE - 5406 REACTIONS TO VERIFY FROM 592 DOCUMENTS

100.0% DONE 5406 VERIFIED 13 HIT RXNS 12 DOCS

SEARCH TIME: 00.00.05

L3 12 SEA SSS FUL L1 (13 REACTIONS)

=> file caplus

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FULL ESTIMATED COST 123.13 123.35

FILE 'CAPLUS' ENTERED AT 14:24:39 ON 10 AUG 2009
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FILE COVERS 1907 - 10 Aug 2009 VOL 151 ISS 7
FILE LAST UPDATED: 9 Aug 2009 (20090809/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the second quarter of 2009.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s 13 L4 12 L3

=> s 13 not py > 2005 12 L3 5386437 PY > 2005

L5 3 L3 NOT PY > 2005

=> d 15 ibib abs 1-YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y

L5 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN ACCESSION NUMBER: 2005:586823 CAPLUS

DOCUMENT NUMBER: 143:76947

TITLE: Enzymic manufacture of monomethacrylic acid esters

INVENTOR(S):
Sakurai, Yoko

PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005176802	А	20050707	JP 2003-426355	20031224
PRIORITY APPLN. INFO.:			JP 2003-426355	20031224

OTHER SOURCE(S): CASREACT 143:76947

The monomethacrylic acid esters are manufactured with (immobilized) lipase from (meth)acrylic acid, active hydrogen-containing compds., organic solvents, etc., in the presence of 0.01-0.5 weight% water. Adsorbents such as silica, activated clay, activated charcoal, zeolite, ion exchanger, etc., are also used in the enzymic reaction. The method is fast and gives low loss of the enzymic activity. It gives selectively monomethacrylic acid esters. Manufacture of hydroxyethylacrylate with lipase was shown.

L5 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:353049 CAPLUS

DOCUMENT NUMBER: 140:374007

TITLE: Enzyme-catalyzed esterification of pendant carboxylic

acid groups of polymers

INVENTOR(S): Gross, Richard A.; Sahoo, Bishwabhusan

PATENT ASSIGNEE(S): Polytechnic University, USA SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA:	TENT 1	NO.			KIND DATE APPLICATION NC					NO.		D.	ATE				
	US	2004	0082	 023		A1	_	2004	0429		us 2	002-	 2783	 20		2	0021	023
	US	6924	129			В2		2005	0802									
	WO	2004	0379	80		A2		2004	0506	•	WO 2	003-	US33	292		2	0031	021
	WO	2004	0379	80		А3		2004	0826									
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			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
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			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,
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			TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
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			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
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			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
	ΑU	2003	3015	84		A1		2004	0513		AU 2	003-	3015	84		2	0031	021
PRIOF	TIS	Y APP	LN.	INFO	.:						US 2	002-	2783	20	i	A 2	0021	023
										•	WO 2	003-	US33	292	Ţ	W 2	0031	021
OTHER	TUED COUDCE/C). CACDEACT 1/0.37/007																	

OTHER SOURCE(S): CASREACT 140:374007

AB A method for enzymically synthesizing a polymer by combining a preselected quantity of an enzyme, a first reactant selected from polymers with at least one carboxylic acid pendant group, a second reactant selected from alcs., i.e., polyols, in a reaction vessel; heating the reaction vessel to a preselected temperature; and maintaining the reaction vessel at the

preselected temperature for a preselected time with mixing, wherein an esterification reaction results at at least one carboxylic acid pendant group of the polymer with one hydroxyl group from the polyol and results in a modified polymer. Thus, polyacrylic acid was esterified with ethylene glycol using lipase.

L5 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1994:457002 CAPLUS

DOCUMENT NUMBER: 121:57002

ORIGINAL REFERENCE NO.: 121:10269a,10272a

TITLE: New route for preparation of esters

INVENTOR(S): Costabile, Jose Antonio; Campos, Jairo Aguiar De

PATENT ASSIGNEE(S): Quimica Nacional Quiminasa S/A, Brazil

SOURCE: Braz. Pedido PI, 14 pp.

CODEN: BPXXDX

DOCUMENT TYPE: Patent LANGUAGE: Portuguese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BR 9302152	A	19931116	BR 1993-2152	19930617
PRIORITY APPLN. INFO.:			BR 1993-2152	19930617

OTHER SOURCE(S): CASREACT 121:57002; MARPAT 121:57002

The title route involves a catalytic (sic) process involving reaction of metal salts (Li, Na, K, Mg, Ca, Ba, Mn, Ni, Mo, Zn, Cu, Ag, Pt, or Au) of organic acids with inorg. esters. For example, reaction of stearyl borates, e.g. B(OC18H37)3 or NaOB(OC18H37)2, with stearic acid salts (Na, K, Ca, Mg, Zn, Li, etc.) in refluxing solvents (e.g., PhMe, xylene, H2O, acetates, n-hexane) gives stearyl stearate with approx. 95% conversion in 2 h. Similarly, reaction of sucrose with 1 mol equiv metaboric acid at approx. 100° gave the metaborate ester, with reacted with Na linoleate in aqueous alc. solution at approx. 70° to give sucrose octalinoleate in > 90% conversion. Addnl. prepns. include glycerin acrylate and methacrylate, and other sucrose esters.

=> s 15 not 14

L6 0 L5 NOT L4

=> s 14 not 15

L7 9 L4 NOT L5

=> d 17 ibib abs 1-

YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2009:427131 CAPLUS

DOCUMENT NUMBER: 150:399069

TITLE: Process for fabrication of acrolein from glycerol

INVENTOR(S): Dubois, Jean-Luc
PATENT ASSIGNEE(S): Arkema France, Fr.
SOURCE: PCT Int. Appl., 25pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009044081	A1	20090409	WO 2008-FR51620	20080911

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             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
             IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
             TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
     FR 2921361
                         A1 20090327 FR 2007-57708
                                                                      20070920
                                             FR 2007-57708
PRIORITY APPLN. INFO.:
                                                                 A 20070920
                        CASREACT 150:399069
OTHER SOURCE(S):
     The invention has as an aim a method of preparation of acrolein, useful in the
     manufacture of acrylic acid, by dehydrogenation of glycerol in the presence of
     a catalytic system based on oxides of P, Fe, and \geq 1 other element
     chosen among alkali metals, alkaline-earth metals, Al, Si, B, Co, Cr, Ni, V,
     Zn, Zr, Sn, Sb, Ag, Cu, Nb, Mo, Y, Mn, Pt, Rh, rare earths, La, Ce, and
     Sm. The process is implemented preferably in phase gas in the presence of
     oxygen starting with aqueous glycerol solns. The process according to the
     invention makes it possible to obtain acrolein in increased selectivity.
                                THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                          6
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:
                         2009:426346 CAPLUS
DOCUMENT NUMBER:
                          150:399067
TITLE:
                         Reactive vaporization of glycerol to purify and
                         manufacture acrolein and acrylic acid
                         Dubois, Jean-Luc; Patience, Gregory
INVENTOR(S):
PATENT ASSIGNEE(S):
                        Arkema France, Fr.
                         PCT Int. Appl., 33pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                          French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:
     PATENT NO. KIND DATE APPLICATION NO. DATE
                        ____
     WO 2009044051
                         A1 20090409
                                           WO 2008-FR51585 20080905
         W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
             CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES,
             FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
             KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
             ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,
             PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
             TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
             AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                                             FR 2007-57396
     FR 2920767
                         A1
                                 20090313
                                                                      20070906
                                             FR 2007-57396 A 20070906
PRIORITY APPLN. INFO.:
OTHER SOURCE(S):
                         CASREACT 150:399067
     The invention has as an aim a process of reactive vaporization of aqueous
     glycerol solns. in a fluidized bed containing a solid catalyst at
     180-400^{\circ}. The process of the invention simultaneously makes it
     possible to vaporize an aqueous glycerol solution, to eliminate the impurities
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present in this solution or generated during evaporation, and to carry out the

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,

reaction of dehydrogenation to acrolein and/or oxydehydrogenation to acrylic acid.

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2008:70968 CAPLUS

DOCUMENT NUMBER: 148:145188

Membrane catalyst for synthesizing acrylic acid from TITLE:

glycerol

INVENTOR(S): Dubois, Jean-Luc PATENT ASSIGNEE(S): Arkema France, Fr. PCT Int. Appl., 21pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT :	NO.			KIN	D	DATE APPLICATION N						NO.		D.	ATE	
WO	2008	0070	02		A2	_	2008	0117	,	WO 2	007-	FR51	 596		2	0070	705
WO	2008	0070	02		АЗ		2008	0228									
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		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FI,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NΙ,	NO,	NZ,	OM,	PG,	PH,	PL,
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FR	2903	620			A1		2008	0118		FR 2	006-	5296	0		2	0060	713
FR	2903	620			В1		2009	0220									
RITY	Y APP	LN.	INFO	.:						FR 2	006-	5296	0		A 2	0060	713

OTHER SOURCE(S): CASREACT 148:145188

The title membrane catalyst comprises a first layer composed of a phase capable of selectively converting acrolein into acrylic acid, and a second layer B formed on said first layer A, composed of an acid phase having a Hammett acidity H0 of less than +2, capable of selectively performing the glycerol into acrolein dehydration reaction. The layer A is formed on an inert support and contains ≥1 element selected from Mo, V, W, Re, Cr, Mn, Fe, Co, Ni, Cu, Zn, Sn, Te, Sb, Pt, Pd, Ru, and Rh in the form of metals, oxides, sulfates, or phosphates. Layer B is an acid phase selected from zeolites, sulfonated fluoropolymers, chlorinated alumina, phospho- or silicotungstic acids or salts, or metal oxides such as Ta205, Nb205, Al203, TiO2, ZrO2, SnO2 silica, or SiO2-Al2O3 impregnated by acids such as BO3, SO4, WO3, PO4, SiO2, or MoO3.

OS.CITING REF COUNT: THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD 3 (4 CITINGS)

ANSWER 4 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:873658 CAPLUS

DOCUMENT NUMBER: 147:214004

TITLE: Process for preparation of acrylic acid

Dubois, Jean Luc Arkema, Fr. INVENTOR(S):

PATENT ASSIGNEE(S):

SOURCE: Fr. Demande, 16pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA.	PATENT NO.						DATE			APPL	ICAT	ION I	NO.		D	ATE	
FR	2897				A1		2007	0810		 FR 2	2006-	 1061			2	0060	207
FR	2897	059			В1		2008	0418									
WO	2007	0909	91		A2		2007	0816		WO 2	2007-1	FR50	758		2	0070	206
WO	2007	0909	91		А3		2007	1206									
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		GM,	ΚE,	LS,	MW,	MΖ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	ΑZ,	BY,
		KG,	KΖ,	MD,	RU,	ΤJ,	TM,	AP,	EA,	EP,	OA						
EP	1981	835			A2		2008	1022		EP 2	2007-	7315	84		2	0070	206
EP	1981	835			В1		2009	0506									
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		IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR	
	4307										2007-						
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IN	2008	DN06	649		Α		2008	1024		IN 2	008-1	DN66	49		2	0080	731
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MX	2008	0100	86		A		2008	0818		MX 2	008-	1008	6		2	0080	806
CN	1014	0063	9		A		2009	0401		CN 2	2007-	8000	4590		2	0080	806
KR	2008	0924	29		A		2008	1015			008-					0080	
PRIORIT	Y APP	LN.	INFO	.:						FR 2	006-	1061		1	A 2	0060	207
											2007-1					0070	
OTHER SO	OURCE	(S):			CAS	REAC	T 14	7:21	4004								

AΒ The process includes steps of: (1) oxidation of propylene to acrolein, and (2) oxidation of acrolein to acrylic acid where glycerol is dehydrated to propylene in the presence of an oxidation gas resulting from the step (1) for improving productivity. The process of the invention makes it possible to partly use a renewable raw material.

REFERENCE COUNT: THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 5 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
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ACCESSION NUMBER: 2007:769785 CAPLUS

DOCUMENT NUMBER: 148:80954

TITLE: Studies on the use of glycerol in organic synthesis.

Part 1. Conversion of glycerol to acrolein

Kijenski, Jacek; Migdal, Antoni; Tecza, Witold; AUTHOR(S): Smigiera, Ewa; Osawaru, Osazuwa; Memtusiak, Monika Zaklad Proekol. Modernizacji Technol., Inst. Chem. CORPORATE SOURCE:

Przem. im. Ignacego Moscickiego, Warsaw, Pol.

SOURCE: Przemysl Chemiczny (2007), 86(4), 278-281

CODEN: PRCHAB; ISSN: 0033-2496 Wydawnictwo SIGMA-NOT

PUBLISHER:

Journal DOCUMENT TYPE: LANGUAGE: Polish

OTHER SOURCE(S): CASREACT 148:80954

Glycerol (concentrate 40-90%) was dehydrated to acrolein and allyl alc. at 280 to $400\,^{\circ}\mathrm{C}$ in laboratory batch reactor on a solid catalyst. The highest conversion degrees were achieved when SiO2-Al2O3 and H2SO4/SiO2-Al2O3 catalysts were used (0.30 and 0.29 mol/mol to acrolein and 0.282 to 0.220

mol/mol to allyl alc. at $300\,^{\circ}\text{C}$, resp.). The mixture of acrolein and allyl alc. was directly oxidized to acrylic acid at $200-450\,^{\circ}\text{C}$ on oxide Mo-V catalyst.

L7 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1147117 CAPLUS

DOCUMENT NUMBER: 145:471154

TITLE: Catalytic oxidative dehydration method for producing

acrylic acid from glycerol

INVENTOR(S): Dubois, Jean-Luc; Duquenne, Christophe; Hoelderich,

Wolfgang

PATENT ASSIGNEE(S): Arkema France, Fr. SOURCE: PCT Int. Appl., 28pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

	PATENT NO.							DATE			APPL	ICAT	ION :	NO.		D	ATE	
	WO	2006	 1145	 06							 WO 2	006-	 FR90	 7		2	 0060	424
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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OTHER	THER SOURCE(S): CASREAC						T 14	5:47	1154									

OTHER SOURCE(S): CASREACT 145:471154

AB A method for producing acrylic acid in one step by a catalytic oxydehydration reaction of glycerol in the presence of mol. oxygen is described. The reaction is preferably carried out in the gaseous phase in the presence of a suitable catalyst.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1093270 CAPLUS

DOCUMENT NUMBER: 145:417186

TITLE: Enzymatic conversion of epoxides to diols by epoxide

hydrolase

INVENTOR(S):
Schoening, Kai-Uwe

PATENT ASSIGNEE(S): Ciba Specialty Chemicals Holding Inc., Switz.

SOURCE: PCT Int. Appl., 28pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.								APPLICATION NO.					DATE			
WO	2006	 1087	 71		A1	_	2006	1019		WO 2	006-	EP61.	 260		2	0060	403
	W:	ΑE,	AG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
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		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
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CA	2601	994			A1		2006	1019	1	CA 2	006-	2601	994		2	0060	403
EP	1869	198			A1		2007	1226	,	EP 2	006-	7255	06		2	0060	403
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US	2009	0061	494		A1		2009	0305		US 2	007-	8879	82		2	0071	005
IN	2007	CN04	488		Α		2008	0125		IN 2	007-	CN44	88		2	0071	010
PRIORITY	APP	LN.	INFO	.:					EP 2005-102822			22		A 20050411			
									,	WO 2	006-	EP61.	260	1	w 2	0060	403

OTHER SOURCE(S): CASREACT 145:417186; MARPAT 145:417186

AB A process is provided for the production of diols from epoxides using an epoxide hydrolase. Addnl. provided is a process for producing polymers from the diols produced or for polymerizing the epoxides and hydrolyzing the epoxy ring afterwards. The epoxide hydrolase may be used in a free form or in the form of lyophilized microbial cells.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1005768 CAPLUS

DOCUMENT NUMBER: 145:377531

TITLE: Preparation of glycerin diesters from ester mixtures

by removing monoesters and triesters with specific

solvents

INVENTOR(S): Takase, Yoyohito; Maki, Keiji
PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO	. DATE
JP 2006257044	A	20060928	JP 2005-79159	20050318
PRIORITY APPLN. INFO.:			JP 2005-79159	20050318
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OTHER SOURCE(S): CASREACT 145:377531

AΒ Glycerin diesters are prepared from a solution having pH ≥5 containing at least glycerin monoesters and the glycerin diesters with a solvent having solubility parameter ≥ 8.5 (solvent A) or prepared from a solution having pH ≥5 containing at least the glycerin diesters and glycerin triesters with a solvent having solubility parameter <8.5 (solvent B). Alternatively, the glycerin diesters are prepared from a solution having pH ≥5 containing glycerin monoesters, the glycerin diesters, and glycerin triesters with solvent A and solvent B to sep. the glycerin monoesters and the glycerin triesters, resp. Thus, glycerin was treated with acrylic acid in the presence of methoguinone and H2SO4 at 70° for 5 h, and the reaction mixture was adjusted to pH 8.3, mixed with toluene (solubility parameter 8.93), and separated into an oil phase and an aqueous phase. Toluene was removed from the aqueous phase upon bubbling with air, and the recovered mixture of diacrylate and triacrylate was mixed with hexane (solubility parameter 7.27) and H2O and separated to give 63.2% glycerin diacrylate from the aqueous phase.

L7 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:468024 CAPLUS

DOCUMENT NUMBER: 141:22300

TITLE: Enzymatic synthesis of polyol acrylates

INVENTOR(S): Paulus, Wolfgang; Hauer, Bernhard; Haering, Dietmar;

Dietsche, Frank

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PF	ATENT	N	Ο.			KINI	D	DATE		APPLICATION NO.			. O <i>V</i>		D	ATE			
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OTHER SOURCE(S): CASREACT 141:22300

AB The invention provides a method for the enzymic synthesis of polyol acrylates, or polymeric polyol acrylates. The invention also provides unique polymers that can be obtained according to this method and to the their use for producing radiation-curable and thermally curable paints.

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT